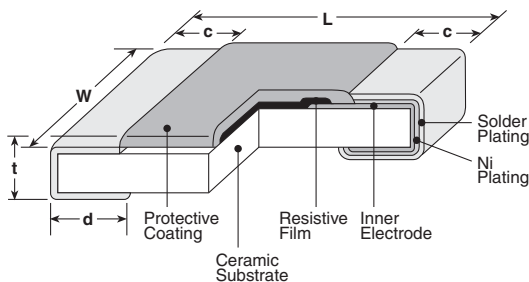


features

- High precision resistor with T.C.R. of ± 50 ppm/°C and tolerance of $\pm 0.25\%$, $\pm 0.5\%$ or $\pm 1\%$
- Marking: 1H, 1E: no marking on black protective coating
1J: no marking for E-96, white 3-digits for E-24, on dark blue protective coating
2A, 2B: white 4-digit on dark blue protective coating
- Products with lead-free terminations meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.
- AEC-Q200 Qualified: 0201 (1H), 0402 (1E), 0603 (1J), 0805 (2A), 1206 (2B)

dimensions and construction



Type (Inch Size Code)	Dimensions inches (mm)				
	L	W	c	d	t
1H (0201)	.024 $\pm$.001 (0.6 $\pm$ 0.03)	.012 $\pm$.001 (0.3 $\pm$ 0.03)	.004 $\pm$.002 (0.1 $\pm$ 0.05)	.006 $\pm$.002 (0.15 $\pm$ 0.05)	.009 $\pm$.001 (0.23 $\pm$ 0.03)
1E (0402)	.039 $\begin{smallmatrix} +.004 \\ -.002 \end{smallmatrix}$ (1.0 $\begin{smallmatrix} +0.1 \\ -0.05 \end{smallmatrix}$)	.02 $\pm$.002 (0.5 $\pm$ 0.05)	.008 $\pm$.004 (0.2 $\pm$ 0.1)	.01 $\begin{smallmatrix} +.002 \\ -.004 \end{smallmatrix}$ (0.25 $\begin{smallmatrix} +0.05 \\ -0.1 \end{smallmatrix}$)	.014 $\pm$.002 (0.35 $\pm$ 0.05)
1J (0603)	.063 $\pm$.008 (1.6 $\pm$ 0.2)	.031 $\pm$.004 (0.8 $\pm$ 0.1)	.012 $\pm$.004 (0.3 $\pm$ 0.1)	.012 $\pm$.004 (0.3 $\pm$ 0.1)	.018 $\pm$.004 (0.45 $\pm$ 0.1)
2A (0805)	.079 $\pm$.008 (2.0 $\pm$ 0.2)	.049 $\pm$.004 (1.25 $\pm$ 0.1)	.016 $\pm$.008 (0.4 $\pm$ 0.2)	.012 $\begin{smallmatrix} +.008 \\ -.004 \end{smallmatrix}$ (0.3 $\begin{smallmatrix} +0.2 \\ -0.1 \end{smallmatrix}$)	.02 $\pm$.004 (0.5 $\pm$ 0.1)
2B (1206)	.126 $\pm$.008 (3.2 $\pm$ 0.2)	.063 $\pm$.008 (1.6 $\pm$ 0.2)	.02 $\pm$.012 (0.5 $\pm$ 0.3)	.016 $\begin{smallmatrix} +.008 \\ -.004 \end{smallmatrix}$ (0.4 $\begin{smallmatrix} +0.2 \\ -0.1 \end{smallmatrix}$)	.024 $\pm$.004 (0.6 $\pm$ 0.1)

ordering information

New Part #	RK73G	1J	T	TD	1003	F
Type		Size	Termination Material	Packaging	Nominal Resistance	Tolerance
		1H 1E 1J 2A 2B	T: Sn (1H, 1E, 1J, 2A, 2B) L: SnPb (1E, 1J, 2A, 2B)	TA: 0201 only: 1mm pitch pressed paper TC: 0201 only: 7" 2mm pitch pressed paper (TC: 10,000 pcs/reel, TCM: 15,000 pcs/reel) TPL: 0402 only: 2mm pitch punch paper TP: 0402, 0603, 0805: 7" 2mm pitch punch paper TD: 0603, 0805, 1206: 7" 4mm pitch punched paper TDD: 0603, 0805, 1206: 10" paper tape TE: 0805, 1206: 7" embossed plastic TED: 0805, 1206: 10" embossed plastic For further information on packaging, please refer to Appendix A	3 significant figures + 1 multiplier "R" indicates decimal on value <100Ω	New C: $\pm 0.25\%$ D: $\pm 0.5\%$ F: $\pm 1\%$

applications and ratings

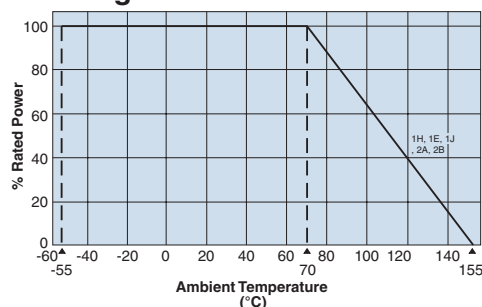
Part Designation*	Power Rating	Rated Ambient Temp.	Rated Terminal Part Temp.	T.C.R. (ppm/°C) Max.	Resistance Range			Absolute Maximum Working Voltage	Absolute Maximum Overload Voltage
					New E-24, E-96 (C±0.25%)	E-24, E-96 (D±0.5%)	E-24, E-96 (F±1%)		
RK73G1H (0201)	1/20W (.05W)	70°C	—	±50	—	100Ω - 1MΩ**	100Ω - 1MΩ**	25V	50V
RK73G1E (0402)	1/10W (.10W)		125°C		100Ω - 1MΩ	10Ω - 1MΩ	10Ω - 1MΩ	50V	100V
RK73G1J (0603)	1/10W (.10W)							75V	150V
RK73G2A (0805)	1/8W (.125W)							150V	200V
RK73G2B (1206)	1/4W (.25W)							200V	400V

Operating Temperature Range: -55°C ~ +155°C

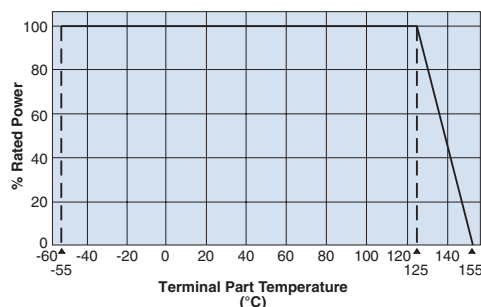
* Parentheses indicate EIA package size codes.

** RK73G1H available in E-24 decade values only

Derating Curve



For resistors operated at an ambient temperature of 70°C or above, a power rating shall be derated in accordance with the derating curve.



For resistors operated terminal part temperature of described for each size or above, a power rating shall be derated in accordance with derating curve. Please refer to "Introduction of the derating curves based on the terminal part temperature" in the beginning of our catalog before use.

environmental applications

Performance Characteristics

Parameter	Requirement $\Delta R \pm(\%+0.1\Omega)$		Test Method
	Limit	Typical	
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	1H: +25°C/+125°C, 1E, 1J, 2A, 2B: +25°C/-55°C and +25°C/+125°C
Overload (Short time)	±2%	±0.6%	Rated Voltage x 2.5 for 5 seconds (1E, 2B: Rated Voltage x 2 for 5 seconds)
Resistance to Solder Heat	±1%	±1%: 1H, ±0.4%: 1E, 1J, 2A, 2B	260°C ± 5°C, 10 seconds ± 1 second
Rapid Change of Temperature	±0.5%	±0.3%	-55°C (30 minutes), +125°C (30 minutes), 100 cycles
Moisture Resistance	±2%: 1J, 2A, 2B ±3%: 1H, 1E	±0.6%: 1J, 2A, 2B; ±1%: 1H, 1E	40°C ± 2°C, 90%-95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 70°C	±2%: 1J, 2A, 2B ±3%: 1H, 1E	±0.6%: 1J, 2A, 2B; ±1%: 1H, 1E	70°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±1%	±0.6%	+155°C, 1000 hours

For Surface Temperature Rise Graph see Environmental Applications. Additional environmental applications can also be found at www.koaspeer.com

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

6/20/17

Mouser Electronics

Authorized Distributor

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KOA Speer:

RK73G2BTDD7502F	RK73G1ETTP2000F	RK73G2BTDD1001F	RK73G2BTDD15R0F	RK73G2BTDD1000F
RK73G2BTDD2491F	RK73G2BTDD1302F	RK73G2BTDD2492F	RK73G2BTDD4022F	RK73G2BTDD6042F
RK73G2BTDD1003F	RK73G2BTDD3573F	RK73G1JTDD3652F	RK73G2ALTD6810F	RK73G2ATDD2211D
RK73G2ATDD4992F	RK73G2ALTD1373F	RK73G1ETTP2742F	RK73G1JTDD4993F	RK73G1JTDD4023D
RK73G1JTDD1502F	RK73G1JTDD3322F	RK73G1JTDD6812F	RK73G1JTDD8251F	RK73G2ATDD1002D
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RK73G2BLTD1181F	RK73G1ETTP1004F	RK73G1ETTP1742F	RK73G1JLTD1001F	RK73G1JLTD1003F
RK73G1JLTD2212D	RK73G1JTDD1000F	RK73G1JTDD1002D	RK73G1JTDD1002F	RK73G1JTDD1003F
RK73G1JTDD1004F	RK73G1JTDD1332D	RK73G1JTDD2001F	RK73G1JTDD2002F	RK73G1JTDD2201F
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RK73G2ALTD1001F	RK73G2ALTD1002F	RK73G2ALTD1004F	RK73G2ALTD10R0F	RK73G2ALTD1103D
RK73G2ALTD1211F	RK73G2ALTD1433F	RK73G2ALTD1742F	RK73G2ALTD1803D	RK73G2ALTD1963F
RK73G2ALTD2001F	RK73G2ALTD2200F	RK73G2ALTD2202F	RK73G2ALTD2211F	RK73G2ALTD2213F
RK73G2ALTD2403D	RK73G2ALTD2432F	RK73G2ALTD3003D	RK73G2ALTD3920F	RK73G2ALTD4022F
RK73G2ALTD4123F	RK73G2ALTD4703F	RK73G2ALTD4751F	RK73G2ALTD4753F	RK73G2ALTD47R0F
RK73G2ALTD4991F	RK73G2ATDD1000F	RK73G2ATDD1001D	RK73G2ATDD1001F	RK73G2ATDD1002F
RK73G2ATDD1003F	RK73G2ATDD1004F	RK73G2ATDD1102D	RK73G2ATDD1210F	RK73G2ATDD1501F
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RK73G2ATDD4701F	RK73G2ATDD5100F	RK73G2ATDD5110F	RK73G2ATDD9091F	RK73G2ATDD1004F